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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/582,714	10/03/2000	Arnaud Vilbert	5725.0622	8388

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EXAMINER
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WANG, SHENGJUN

ART UNIT	PAPER NUMBER
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1617

DATE MAILED: 10/26/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

**Office Action Summary**

Application No.

09/582,714

Applicant(s)

VILBERT, ARNAUD

Examiner

Shengjun Wang

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 08 August 2006.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 27 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 27 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                     | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

### DETAILED ACTION

Receipt of applicants' amendments and remarks submitted August 8, 2006 is acknowledged.

#### *Claim Rejections 35 U.S.C. 103*

1. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

2. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Bhatt et al. (USPN 6106808) in view of Ramin et al. (USPN 5683681) and Mougin et al. (WO 97/25021, US 6,395,265 is English equivalence).

3. Bhatt et al. discloses the administration of a composition comprising (1 ) a polyurethane resin (a polycondensate of polyoxyethylene diol, diethylene glycol, dimethylolpropionic acid, and methylene bis-cyclohexyl-4-4'-diisocyanate), Gantrez A425 (a partial butyl ester of vinylmethylether/maleic anhydride copolymer); AMP; ethanol (a cosmetically acceptable medium); and water for setting hair (col. 4, lines 3-18; col. 14, lines 37-61; col. 26, line 50-col. 27, line 29; Table 8). Bhatt et al. teaches that the compositions of the invention provide spray particle sizes of about 20 to 150 microns and that either a pump spray or an aerosol may be used (col. 4, line 20-col. 5, line 15).

4. Bhatt et al. does not specifically teach a spray wherein the hair composition has an average diameter of less than or equal to 80 microns. Furthermore, Bhatt et al. does not

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specifically teach that the composition administered therein comprises a film-forming polymer in addition to the polyurethane or the polyurethane has polysiloxane segment.

5. Ramin et al. teaches that butyl esters of vinylmethylether/maleic anhydride copolymers are film-forming polymers (col. 2, lines 31-44). Mougin et al. teach block copolymers of polyurethane and polysiloxane, which are particularly useful as film forming, or additive to a film-forming agent for hair treatment. The copolymer provides superior properties over known film forming agents in hair products. The copolymers may be used in any forms of conventional hair products, such as aerosol. See, particularly, the abstract, col. 2, lines 56-65; col. 10, lines 14-58; col. 11, lines 5-30, and the claims (claim 54 in particular) in US 6,395,265.

6. Accordingly, Bhatt et al. teaches administration of a composition comprising a polycondensate polyurethane; a film-forming polymer', and a cosmetically acceptable medium in a particle size of between 20 and 150 microns from either a pump spray container or an aerosol container for setting (holding) hair.

Therefore, it would have been prima facie obvious to a person of ordinary skill in the art, at the time the claimed the invention was made, to modify Bhatt's method by incorporating the copolymer disclosed by Mougin et al. in the hair composition, or substituting the polyurethane with the copolymer and other known film forming agent such as those disclosed by Ramin.

A person of ordinary skill in the art would have been motivated to modify Bhatt's method by incorporating the copolymer disclosed by Mougin et al. in the hair composition, or substituting the polyurethane with the copolymer and other known film forming agent such as those disclosed by Ramin because the copolymers disclosed by Mougin et al, and as herein claimed, are known to provide superior properties as film forming agent or film forming additive for hair products

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and is particularly known to be useful in aerosol form. As to the droplet size, it is noted that the 80 microns as herein claimed overlaps with the droplet size of 20 to 150 microns taught by Bhatt et al. One would have been motivated to administer the composition from Bhatt et al. from either a pump spray or aerosol container in a particle size less than or equal to 80 microns because of an expectation of success in imparting good hair setting retention and achieving a natural feel to the sprayed hair, as taught by Bhatt et al. (col. 4, lines 3-18). Note it is well settled that “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” In re Aller, 220 F.2d 454, 456, -105 USPQ 233, 235 (CCPA 1955). Further, the optimization of a result effective parameter, e.g., the droplet size of aerosol, is considered within the skill of the artisan. See, In re Boesch and Slaney (CCPA) 204 USPQ 215.

7. Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Mougin et al. (WO 97/25021, or its’ English equivalence, US 6,395,265, ), in further view of Bhatt et al. (USPN 6106808), and Malawer et al. (US 5,458,871)

8. Mougin et al. teach block copolymers of polyurethane and polysiloxane, which are particularly useful as film forming, or additive to a film-forming agent for hair treatment. The copolymer provides superior properties over known film forming agents in hair products. The copolymers may be used in any forms of conventional hair products, such as aerosol. See, particularly, the abstract, col. 2, lines 56-65; col. 10, lines 14-58; col. 11, lines 5-30, and the claims (claim 54 in particular) in US 6,395,265.

9. Mougin et al. do not teach expressly treating hair with a particular aerosol device wherein 80 um droplets are generated.

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10. However, Bhatt et al. teaches that the hair spray compositions provide spray particle sizes of about 20 to 150 microns and that either a pump spray or an aerosol may be used (col. 4, line 20-col. 5, line 15). Malawer et al. disclosed that for hair spray it is generally considered in the art that small droplet is desirable. See, column 1, lines 14-35. Such evidences would fairly support that droplet size in hair spray method is considered as result effect parameters.

Therefore, it would have been prima facie obvious to a person of ordinary skill in the art, to prepare a hair style aerosol composition with the block copolymer of Mougin et al. and with additional film forming agent, in a device so that a optimal and desirable droplet size would be generated. Note it is well settled that “[W]here the general conditions of a claim are disclosed in the prior art, it is not inventive to discover the optimum or workable ranges by routine experimentation.” *In re Aller*, 220 F.2d 454, 456, 105 USPQ 233, 235 (CCPA 1955). Further, the optimization of a result effective parameter, e.g., the droplet size of aerosol, is considered within the skill of the artisan. See, *In re Boesch and Slaney* (CCPA) 204 USPQ 215.

### ***Response to the Arguments***

Applicants, amendments and remarks submitted August 8, 2006 have been fully considered, but are not persuasive.

As to the first rejections, Bhatt et al. in view of Ramin et al. and Mougin et al. Applicants argue that the rejections “ignore” and “contradict” the teaching of Bhatt and Mougin. Particularly, applicants argue that Bhatt teaches that the polyurethans disclosed therein lack mechanic strength, and require fixative resin, and Mougin also discloses silicones lack god mechanical properties and therefore, is not good film forming polymer. The examiner fails to see how the rejections contradict to those facts. The rejections state:

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“Therefore, it would have been prima facie obvious to a person of ordinary skill in the art, at the time the claimed the invention was made, to modify Bhatt’s method by incorporating the copolymer disclosed by Mougin et al. in the hair composition, or substituting the polyurethane with the copolymer and other known film forming agent such as those disclosed by Ramin.

A person of ordinary skill in the art would have been motivated to modify Bhatt’s method by incorporating the copolymer disclosed by Mougin et al. in the hair composition, or substituting the polyurethane with the copolymer and other known film forming agent such as those disclosed by Ramin because the copolymers disclosed by Mougin et al, and as herein claimed, are known to provide superior properties as film forming agent or film forming additive for hair products and is particularly known to be useful in aerosol form.”

It is noted that the multi-blocked copolymer disclosed by Mougin overcomes the disadvantage of pure silicone polymer. (col. 2, line 56 to col. 3, line 12), and are particularly useful in various hair products, including mousse, styling or treating lotion or gel, hair shaping or hair setting lacquer or lotion or gel, fixing forms, etc. (col. 10, lines 11-22). It is apparent that the polymer is not only function as film forming polymer, but also as fixative polymer (because of the improved mechanic properties).

As to the remarks about fixative polymer, it is noted that the claims herein use “comprising” and are open to any other additional ingredients. Further, it is noted that the fixative polymer is optional. Therefore, the art as a whole provides clear motivation modify Bhatt’s teaching by either incorporating the copolymer disclosed by Mougin et al. in the hair

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composition, or substituting the polyurethane with the copolymer and other known film forming agent such as those disclosed by Ramin.”

It is further contend that the employment of two film forming polymers in hair composition would have been obvious to one of ordinary skill in the art because it is prima facie obvious to combine two compositions each of which is taught in the prior art to be useful for same purpose in order to form third composition that is to be used for very the same purpose; idea of combining them flows logically from their having been individually taught in prior art. See In re Kerkhoven, 205 USPQ 1069.

11. As to the rejections over Mougin et al., in further view of Bhatt et al., and Malawer et al. (US 5,458,871). Applicants’ contend that the cited references fails to teaches the “additional film-forming agent.” Applicant’s attention is directed to Mougin. Mougin et al. teach block copolymers of polyurethane and polysiloxane, which are particularly useful as film forming, *or additive to a film-forming agent* for hair treatment. The copolymer provides superior properties over known film forming agents in hair products. The copolymers may be used in any forms of conventional hair products, such as aerosol. See, particularly, the abstract, col. 2, lines 56-65; col. 10, lines 14-58; col. 11, lines 5-30, and the claims (claim 54 in particular) in US 6,395,265. Therefore, Mougin clearly teach the employment of the multiple blocked polymers with other film forming agents.

12. In response to applicant's argument that the examiner's conclusion of obviousness is based upon improper hindsight reasoning, it must be recognized that any judgment on obviousness is in a sense necessarily a reconstruction based upon hindsight reasoning. But so long as it takes into account only knowledge which was within the level of ordinary skill at the



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time the claimed invention was made, and does not include knowledge gleaned only from the applicant's disclosure, such a reconstruction is proper. See *In re McLaughlin*, 443 F.2d 1392, 170 USPQ 209 (CCPA 1971).

13. In response to applicant's arguments against the references individually, one cannot show nonobviousness by attacking references individually where the rejections are based on combinations of references. See *In re Keller*, 642 F.2d 413, 208 USPQ 871 (CCPA 1981); *In re Merck & Co.*, 800 F.2d 1091, 231 USPQ 375 (Fed. Cir. 1986).

14. **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the mailing date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Shengjun Wang whose telephone number is (571) 272-0632. The examiner can normally be reached on Monday to Friday from 7:00 am to 3:30 pm.

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If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Sreeni Padmanabhan, can be reached on (571) 272-0629. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
SHENGJUN WANG  
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Art Unit 1617